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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,260	03/16/2001	Duncan Arthur Newman	033136-115	8276

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EXAMINER
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SMITH, DUANE

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/811,260

Examiner

Duane S. Smith

Applicant(s)

NEWMAN ET AL

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

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1. In view of the IDS filed 11-22-02 and newly discovered art, the previous indication of allowance and issue has been withdrawn and vacated. A new action on the merits follows.
2. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-18 of this application. Specifically the provisional application does not provide support for the claimed features of degassing sensor as in instant claims 1 and 9 along with the specific degassing features of a syringe, actuator, tubing, etc as recited in instant claims 1-18.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Balding et al(US Patent No. 4,892,448)

Balding et al teach an apparatus for eliminating gas bubbles from a syringe(7) including a syringe having an outlet and an operator, an actuator(6) for moving the operator, a tubing(8) connected to the syringe outlet, a sensor(10) positioned adjacent the tubing for sensing bubble elimination; the sensor including a transmitter(11,13,15) on one side of the tubing and an opposite receiver(12,14,16) on the other side of the

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tubing, and a control system(1) to advance the syringe operator until the sensor indicates gas bubble elimination.

5. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobson et al(US Patent No. 3,915,155).

Jacobsen et al teach an apparatus for eliminating gas bubbles from a syringe including a syringe(7) having an outlet and an operator, an actuator(12) for moving the operator, a tubing(9) connected to the syringe outlet, a sensor(14) positioned adjacent the tubing for sensing bubble elimination; the sensor including a transmitter on one side of the tubing and an opposite receiver on the other side of the tubing, and a control system(17) to advance the syringe operator until the sensor indicates gas bubble elimination. Jacobsen et al additionally disclose sealing mechanism(8) positioned between the sensor and the syringe outlet.

6. Claims 1-3 and 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Jenkins et al(US Patent No. 3,985,133).

Jenkins et al teach an apparatus for eliminating gas bubbles from a syringe including a syringe(24) having an outlet(40) and an operator(28), an actuator(36) for moving the operator, a tubing(42) connected to the syringe outlet, a sensor(44,98,100) positioned adjacent the tubing for sensing bubble elimination; the sensor including a transmitter on one side of the tubing and an opposite receiver on the other side of the tubing, and a control system(54,56) to advance the syringe operator until the sensor indicates gas bubble elimination. Jenkins et al additionally disclose sealing mechanism(38) positioned between the sensor and the syringe outlet.

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7. Claim 9 rejected under 35 U.S.C. 102(b) as being anticipated by King et al(US Patent No. 4,578,056).

King et al teach an apparatus for conditioning an organic fluid including a cabinet(10) having a secure environment, an input system(22), a container(35) for receiving an inputted charge, stressors(17) coupled to the cabinet to create a conditioned charge in the container, output system(21) including a receiver for a conditioned charge, and sensor(col. 6 lines 35-40) for detecting gas bubble elimination form a receiver.

8. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Le Boeuf(US Patent No. 6,099,492).

Le Boeuf teaches an apparatus for conditioning an organic fluid including a cabinet(1) having a secure environment, an input system(10), a container( 25)for receiving an inputted charge, stressors(30) coupled to the cabinet to create a conditioned charge in the container, output system(60) including a receiver for a conditioned charge, and sensor(70) for detecting gas bubble elimination form a receiver.

9. Claims 1-18 rejected under 35 U.S.C. 102(a) as being anticipated by WO 01/19318.

WO 01/19318 teach an apparatus for conditioning an organic fluid including a cabinet(21) having a secure environment, an input system(50), a container(56) for receiving an inputted charge, stressors(86,88) coupled to the cabinet to create a conditioned charge in the container, output system including a receiver(52) for a conditioned charge, and sensor(page 16 line 23) for detecting gas bubble elimination

form a receiver. WO 01/19318 additionally teach that the apparatus for eliminating bubbles includes a syringe(52) with outlet and operator(180), actuator(182), outlet tubing(58), the sensor being an opposite transmitter and receiver(, heat sealing mechanism(186), control system(page 16 line 27), and ultrasonic(page 16 line 13) knocker(204) and impactor(205) mechanism.

10. The following is a quotation of 35 .S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Balding et al, Jacobsen et al, and Jenkins et al taken together with Finburgh et al(US Patent No. 5,537,853).

Each of Balding et al, Jacobsen et al and Jenkins et al disclose the apparatus essentially as claimed, supra, except for the sensor to be an ultrasonic sensor as in instant claim 8. However, such gas bubble detections sensors are known in the art as shown by Finburgh et al(68). It would have been obvious to one of ordinary skill in the art to substitute the ultrasonic sensor in for the sensor in the apparatus of any one of Balding et al, Jacobsen et al, and Jenkins et al in order to prevent false reading of air bubbles as suggested by Finburgh et al(col. 1 lines 50-65).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duane S. Smith whose telephone number is 703-308-3792. The examiner can normally be reached on 8:30-6:00 M-TH.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Duane S. Smith  
Primary Examiner  
Art Unit 1724

*[Handwritten signature]*  
4-28-03

dss  
April 28, 2003